

REMARKS

Applicants thank the Examiner for the very thorough consideration given the present application.

Claims 1-19 are now present in this application. Claim 1 is independent. Claim 19 has been added. Claims 1-18 have been amended.

Reconsideration of this application, as amended is respectfully requested.

Drawings

Applicants appreciate the Examiner's indication that the proposed drawing corrections filed on December 3, 2002, have been approved. Corrected formal drawings are submitted concurrently herewith.

Rejections under 35 U.S.C. § 103

Claims 1 and 2 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over the Applicants' admitted Prior Art (assuming it is prior art) in view of U.S. Patent No. 6,317,177B1 to Matsushita et al. (Matsushita). This rejection is respectfully traversed.

A complete discussion of the Examiner's rejection is set forth in the Office Action, and is not being repeated here.

The Examiner admits that the Applicants' assumed admitted prior art (APA) fails to disclose directing a light path of a light beam substantially to a rear side of said light input device in a direction away from the light guide prior to directing said light path to a front side thereof and toward the light guide. The Examiner now relies on Matsushita to supply the deficiency of APA.

While not conceding the appropriateness of the Examiner's rejection, but merely to advance prosecution of the instant application, Applicants respectfully submit that independent claim 1 has been amended to recite a combination of elements in a back light unit in a liquid crystal display, including the path of said light beam is *entirely* directed through a substantially non-solid medium, prior to being directed toward said *light guide plate*.

Applicants respectfully submit that this combination of elements as set forth in independent claim 1 is not disclosed or made obvious by the prior art of record, including Matsushita.

In particular, Matsushita discloses an LCD with an edge light type backlight unit in which *part of the light* emitted from a cold cathode tube (CCT) and reflected by a light reflecting plate is condensed at the end portion of a light conduction plate. *Another part of the light* emitted from the CCT and reflected by the light reflecting plate is *directed upward* and directly irradiates a part of the display area of the liquid crystal panel thereby to form a high luminance irradiation portion (see Abstract if Matsushita and Figs.1 and 2).

Clearly, in the device of Matsushita, a light path of a light beam is not directed *entirely* through a substantially non-solid medium, prior to being directed toward a light guide plate. From Fig.2, it appears that the substantial portion of the light is directed away from the light guide and towards liquid crystal panel 8. A lesser portion (based on a lesser number of arrows) is directed towards a light guide (conduction plate 3). This is necessary because a goal of Matsushita is direct illumination of the panel to achieve greater brightness for alarms.

Therefore, Matsushita, like APA fails to disclose or suggest the path of said light beam is entirely directed through a substantially non-solid medium, prior to being directed toward said light guide plate, as recited in independent claim 1, as amended. Accordingly, Matsushita cannot supply the deficiency of APA.

Claim 2 depends on claim 1. Since neither APA nor Matsushita discloses or suggests the above-recited features of independent claim 1, APA, in view of Matsushita cannot render claims 1 and 2 obvious to one of ordinary skill in the art. Reconsideration and withdrawal of this art grounds of rejection is respectfully requested.

Claims 3-5, 7, 8, 11, 13, 14 and 15

Claims 3-5 and 7 stand rejected under 35 U.S.C. 103(a) over APA in view of Matsushita, as applied to claims 1 and 2, and further in view of U.S. Patent

No. 5,808,708 to Oyama et al. (Oyama). Claims 7, 8, 11, 13 and 14 stand rejected under 35 U.S.C. 103(a) over APA in view of Matsushita as applied to claims 1 and 2, and further in view of U.S. Patent No. 5,808,713 to Broer et al (Broer), and claim 15 stands rejected under 35 U.S.C. 103(a) over APA in view of Matsushita and Broer as applied to claim 14, and further in view of U.S. Patent No. 6,151,169 to Kim. These rejections are respectfully traversed.

APA and Matsushita, argued above with respect to independent claim1, fails to disclose or suggest the path of said light beam is entirely directed through a substantially non-solid medium, prior to being directed toward said light guide plate. Neither Oyama, nor Broer, nor Kim, can fill this vacancy.

Claims 3-5, 7, 8, 11, 13, 14 and 15 depend, either directly or indirectly on independent claim1. Since neither APA, nor Matsushita, nor Oyama, nor Broer, nor Kim discloses or suggests the above-recited features of independent claim 1. APA, Matsushita, Oyama, Broer and Kim, either singly, or in combination, cannot render claims 3-5, 7, 8, 11, 13, 14 and 15 obvious to one of ordinary skill in the art. Reconsideration and withdrawal of these art grounds of rejection is respectfully requested.

Added Claim 19

Independent claim 19 has been added for the Examiner's consideration.

Claim 19 recites a combination of elements in a back light unit in a liquid crystal display, including a light input device for directing a light path from a light source toward the light-guide plate, wherein the light from the light source passed through the light input device to be incident into the light-guide plate without being incident directly to the light-guide plate. Applicants respectfully submit that this combination of elements as set forth in independent claim 19 is not disclosed or made obvious by the prior art of record, including Matsushita. Consideration and allowance of claim 19 is respectfully requested.

Allowable Subject Matter

The Examiner states that claims 6, 9, 10, 12 and 17 contain allowable subject matter, and would be allowable if rewritten in independent form, including all of the limitations of the base claim and any intervening claims.

Applicants thank the Examiner for the early indication of allowable subject matter in this application.

Conclusion

All of the stated grounds of rejection have been properly traversed, accommodated, or rendered moot. Applicants therefore respectfully request that the Examiner reconsider all presently outstanding rejections and that they be

withdrawn. It is believed that a full and complete response has been made to the outstanding Office Action, and as such, the present application is in condition for allowance.

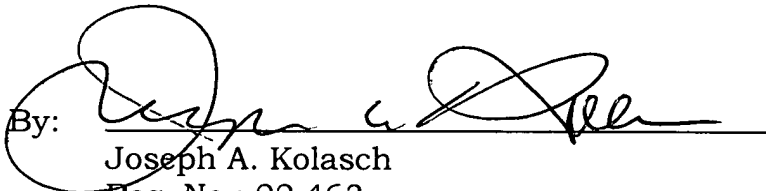
If the Examiner believes, for any reason, that personal communication will expedite prosecution of this application, the Examiner is invited to telephone Percy L. Square, Registration No. 51,084, at (703) 205-8034, in the Washington, D.C. area.

Prompt and favorable consideration of this Amendment is respectfully requested.

If necessary, the Commissioner is hereby authorized in this, concurrent, and future replies, to charge payment or credit any overpayment to Deposit Account No. 02-2448 for any additional fees required under 37 C.F.R. §§ 1.16 or 1.17; particularly, extension of time fees.

Respectfully submitted,

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